Attorney Docket No. 10541-636

Appln. No. 10/004,758

I. Amendments to the Specification

Please add Paragraph [0009a] to the Specification between Paragraphs

[0009] and [0010]:

[0009a] Figure 5b is a cross-sectional view of the pinion in

Figure 4 taken along lines 5b-5b;

Please replace Paragraphs [0009], [0013], [0019] and [0020] with the

following paragraphs:

[0009] Figure [[5]] 5a is a cross-sectional view of the pinion in

Figure 4 taken along lines [[5-5]] 5a-5a;

[0013] The present invention generally provides a starter

assembly having an output shaft and a starter pinion which is

disposed about the output shaft. During engine startup, the starter

pinion "sweeps" or moves undesired particles from the output shaft to

"clean" the shaft. The pinion includes an inner surface which is

disposed about the shaft and has a groove formed therealong to

define primary and secondary cleaning edges. Furthermore, the

inner surface and an end face of the pinion define a secondary

<u>cleaning edge.</u> During startup, the groove and the primary cleaning

edge "sweep" or move undesired particles in a primary cleaning step.

Then, during a subsequent engine startup, in a secondary cleaning

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step, the secondary cleaning edge further move the particles along the shaft and away from the inner surface of the pinion.

[0019] Figure 3 illustrates teeth portion 34 of pinion 12 having inner surface 32 disposed about output shaft 14 wherein inner surface 32 extends to end face 50 of pinion 12. The inner surface 32 and the end face 50 cooperate to define an edge having an angle 51 that is preferably less than or equal to 90 degrees. More preferably, the angle 51 is equal to 90 degrees, as will be discussed further below. Figures 3 and 4 depict primary edges 52 and groove 54 which move particles from the output shaft 14 as pinion 12 rotatably and linearly moves therealong. As shown, each primary edge 52 comprises a side or wall which form respective groove 54. As pinion 12 moves along output shaft 14, one primary edge is formed adjacent another primary edge to define the groove in which particles are received. Primary edges 52 and groove 54 are formed along a length of inner surface 32 and extend to end face 50. In this embodiment, primary edges 52 and groove 54 are formed arcuately or helically along the length of inner surface 32. Of course, primary edges 52 and groove 54 may take on any other suitable shape along the length of inner surface 32. For example, primary edge 52 and groove 54 may be substantially linearly formed along inner surface 32. In this embodiment, the length along which the primary edges 52 and groove 54 are formed includes the entire length of inner surface 32.

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Of course, the length along which the primary edges and the groove are formed may include a portion of the length of inner surface 32.

[0020] As shown in Figures 3 and 4 Figures 3, 4, 5a, and 5b, pinion 12 further includes a plurality of secondary edges 56 radially circumferentially formed along end face 50. As shown in Figures 4 and [[5]] 5b, each secondary edge 56 integrally connects to a respective primary edge 52 at end face 50. Secondary edge 56 then radially circumferentially extends on end face 50. As described in greater detail below, secondary edge 56 further or secondarily cleans or moves particles along shaft 14.